



**A comment on the paper 'Solar activity and its influence  
on climate' Author C. de Jager Published in  
Netherlands Journal of Geosciences-Geologie en  
Mijnbouw, 87-3, pp 207213, 3 2008**

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1 A comment on the paper 'Solar activity and its influence on climate'

2 Author C. de Jager

3 Published in Netherlands Journal of Geosciences-Geologie en Mijnbouw, 87-3, pp 207-213,  
4 2008

5  
6 by Christine Amory-Mazaudier and J-P. Legrand

7 Netherlands Journal of Geosciences-Geologie en Mijnbouw, [88-3] 177, 2009

8  
9 The purpose of this comment is not to criticize the results obtained by Dr C. de Jager, and  
10 we agree for example with his prediction of the next sunspot cycle amplitude – 68 with  
11  $\sigma = 17$ .

12 We just want to recall the necessity to keep scientific memory in order to maintain the  
13 common knowledge. We consider that the work of Dr C. de Jager is based on the results  
14 obtained by Ohm, Legrand and Simon:

- 15 1. Ohl (1966) who pointed out the empirical connection that allows to predict the  
16 amplitude of the next sunspot solar cycle from the values of the aa index (Mayaud  
17 1972) at the time of the magnetic minima which appears during the minima of the  
18 sunspot solar cycle or one year later.
- 19 2. Legrand and Simon (1980-1992) who analyzed the data of ten solar cycles in  
20 order to study the relation between solar and geomagnetic activities and explain  
21 Ohl's results. Among other facts, they showed that recurrent magnetic activity  
22 (related to the divergence of the poloidal solar field) at the end of the sunspot cycles  
23 produced by stable solar wind jets was connected to the maximum of the following  
24 sunspot solar cycle. This is another aspect of the Ohl's relation.

25 We think it is of essential importance that articles using the above results should contain  
26 references to these following papers:

27 Ohl, A., T., 1966, Forecast of sunspot maximum number of cycle 20, Solnice Danie, 12:84-  
28 85.

29 Legrand, J.P. and Simon, P.A., 1981, Ten Cycles of Solar geomagnetic Activity, Solar  
30 Physics, 70/173-195.

31 Legrand, J.P. and Simon, P.A., 1989, Solar cycle and geomagnetic activity: A review for  
32 Geophysicists, Part I. The contributions to geomagnetic activity of shock waves and of the  
33 solar wind, Annales Geophysicae, 7 (6):565-578.

34 Legrand, J.P. and Simon, P.A., 1989, Solar cycle and geomagnetic activity: A review for  
35 Geophysicists, Part II. The solar sources of geomagnetic activity and their links with  
36 sunspot cycle activity, Annales Geophysicae, 7 (6):579-596.

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